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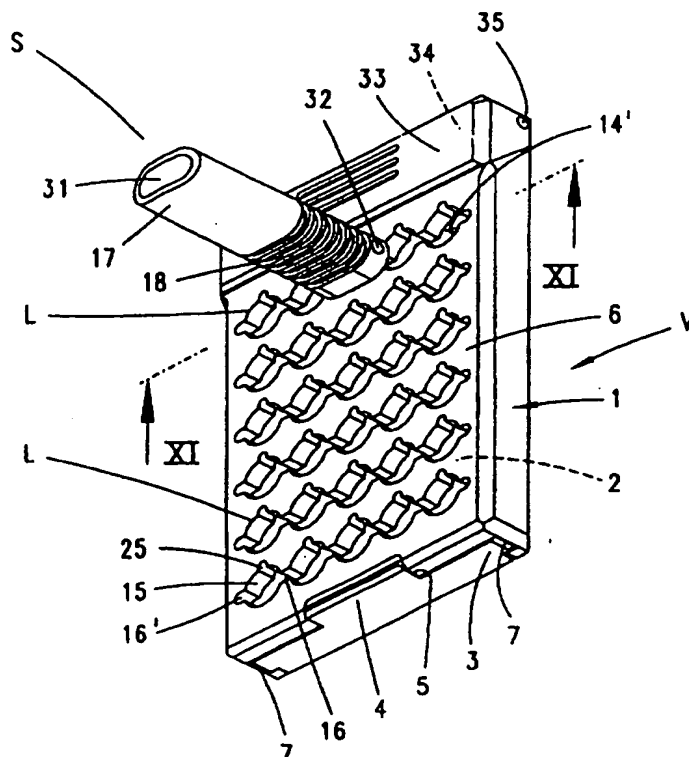
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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(21) International Application Number: PCT/EP97/02144 (22) International Filing Date: 25 April 1997 (25.04.97) (30) Priority Data: 196 16 418.4 25 April 1996 (25.04.96) DE 196 17 555.0 2 May 1996 (02.05.96) DE 196 19 536.5 15 May 1996 (15.05.96) DE (71)(72) Applicant and Inventor: VON SCHUCKMANN, Alfred [DE/DE]; Winnekendonker Strasse 52, D-47627 Kevelaer (DE). (74) Agents: MÜLLER, Enno et al. ; Corneliusstrasse 45, D-42329 Wuppertal (DE).			(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 15 January 1998 (15.01.98)

(54) Title: **INHALER**

(57) Abstract

An inhaler having an inhaler body extending between two ends, an outlet at one of said two ends, a suction tube at the other of said two ends and an inhalation channel within the body providing fluid connection between the suction tube and the outlet, the suction tube being shaped and dimensioned for insertion into a blister containing powder such that the drawing of air through the inhaler body will draw powder from the blister through the suction tube and inhalation channel and out of the outlet, a channel inlet being provided in the suction tube and a cutter being provided around only part of the channel inlet to cut a film cover of a blister around only part of the channel inlet, at least one inlet passage extending between a passage inlet at a position along the length of the suction tube and a passage outlet adjacent the channel inlet to allow air into a blister and blister packs which are distinguishable according to their orientation and/or contents.



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INTERNATIONAL SEARCH REPORT

International Application No

PC1/EP 97/02144

A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 A61M15/00 A61J1/03 B65D75/34 B65D83/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 A61M A61J B65D B05B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	US 2 549 303 A (FRIDEN) 17 April 1951 see figures	1,38,40 14-18, 20,41,42
X Y	WO 96 09085 A (INHALE THERAPEUTIC SYST) 28 March 1996 see page 28, line 27 - page 29, line 34	19,43 14-18, 20,41, 42,44 37
A	see page 35, line 10 - line 16 see page 36, line 7 - line 14; figures 10,11,18,19	
X,P A	DE 195 00 764 A (ASTA MEDICA AG) 25 July 1996 see column 7, line 41 - column 9, line 12; figures	38,40 1,2

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Z document member of the same patent family

Date of the actual completion of the international search

28 November 1997

Date of mailing of the international search report

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INTERNATIONAL SEARCH REPORT

International Application No

PC1/EP 97/02144

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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X	US 5 229 164 A (PINS ET AL.) 20 July 1993 see column 5, line 8 - line 38; figures 2A-3H ---	37
A	US 5 181 189 A (HAFNER) 19 January 1993 see abstract see column 2, last paragraph - column 3, paragraph 1 -----	37

INTERNATIONAL SEARCH REPORT

national application No.
PCT/EP 97/02144

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
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2. ☐ Claims Nos.:
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Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims
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Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

MULTIPLE INVENTIONS

1. Claims: 1-14, 16-18, 20-28, 38, 39, 40
2. Claims: 15-18, 41, 42
3. Claims: 19, 43, 44
4. Claims: 29-34
5. Claims: 35, 36
6. Claims: 37

INTERNATIONAL SEARCH REPORT

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